

FIG. 1

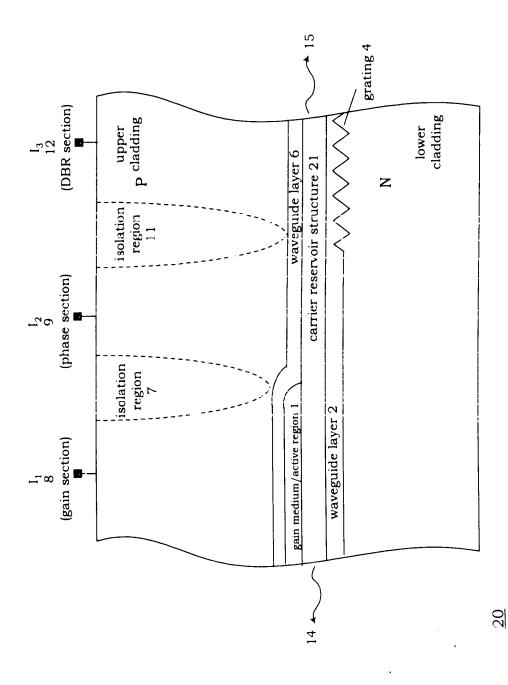


FIG. 2

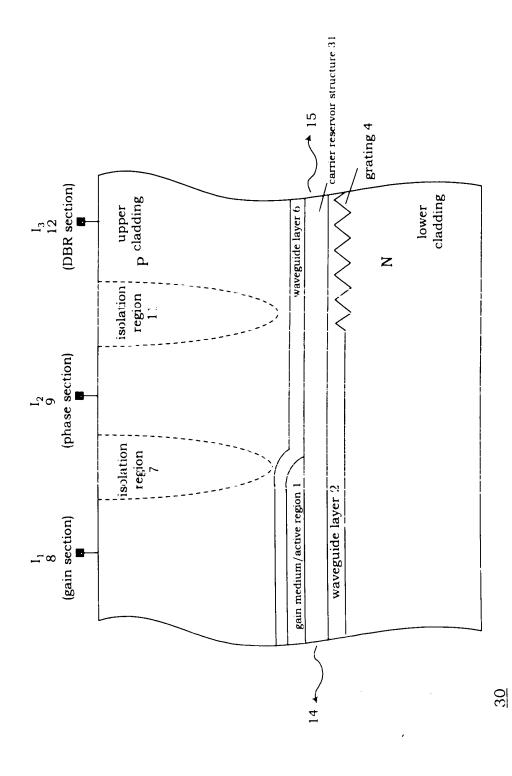


FIG. 3

.17

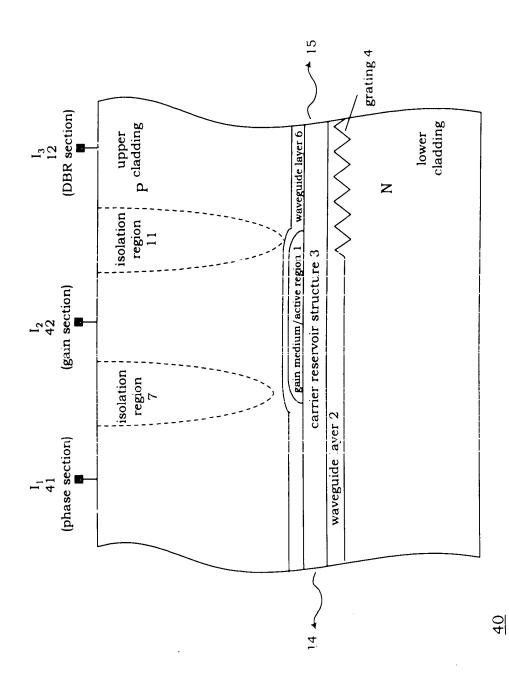


FIG. 4

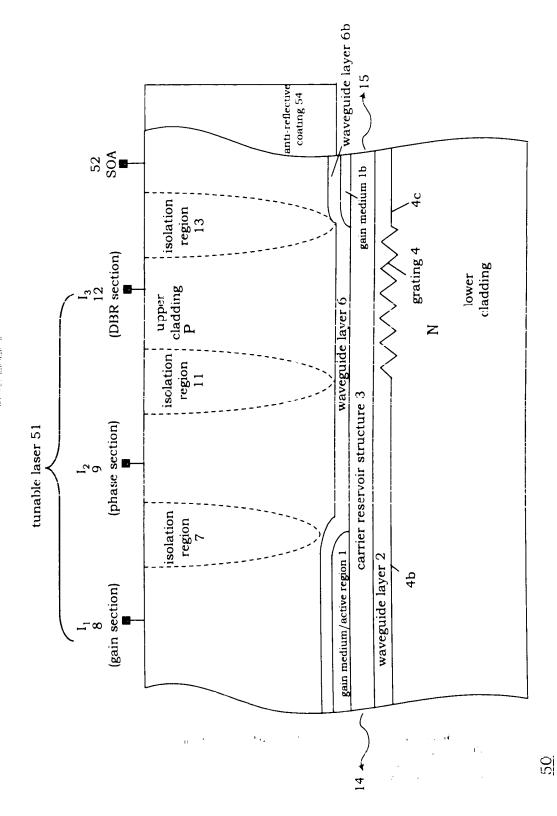


FIG. 5

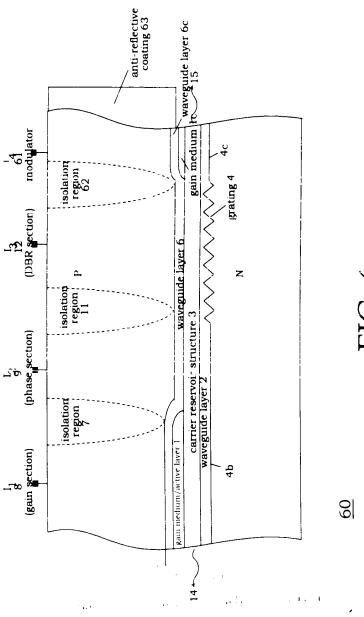
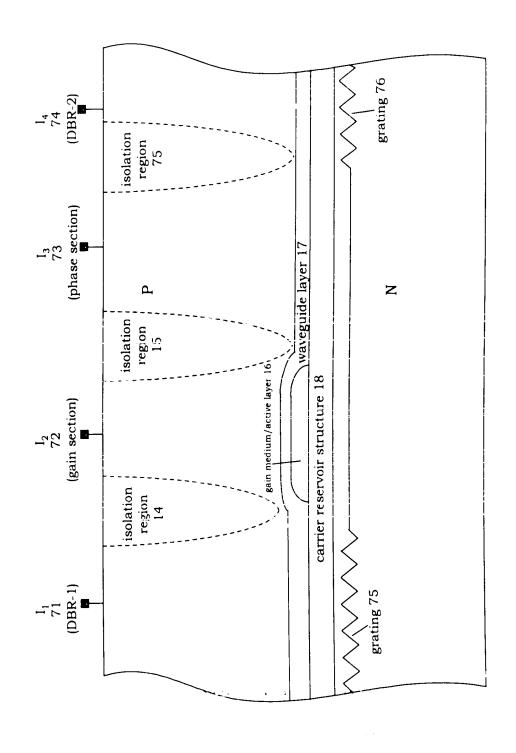
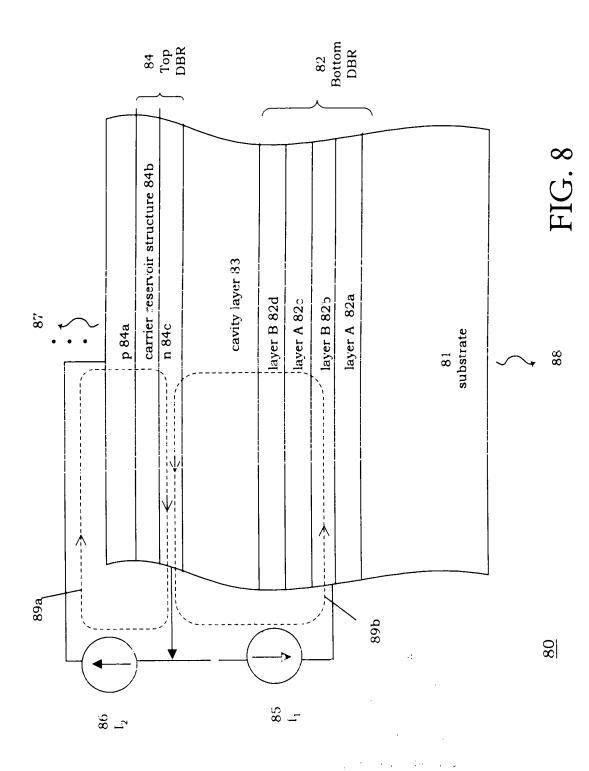
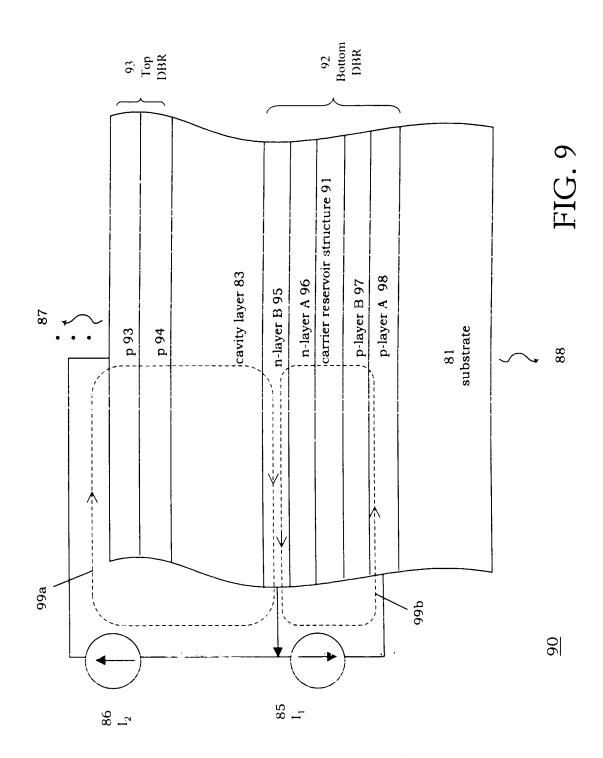


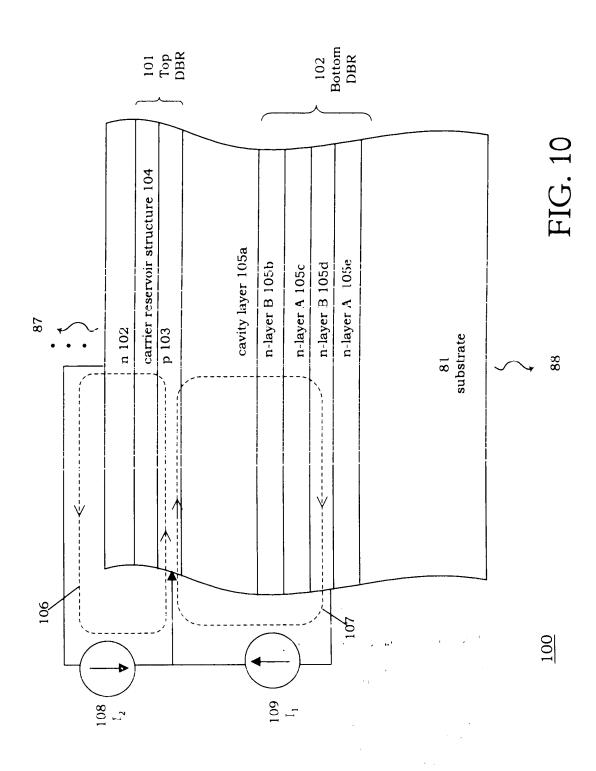
FIG. 6

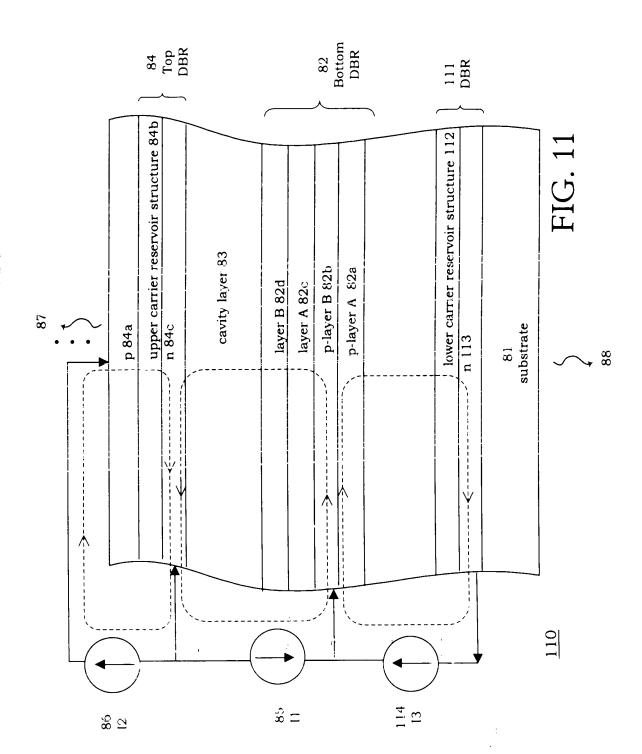


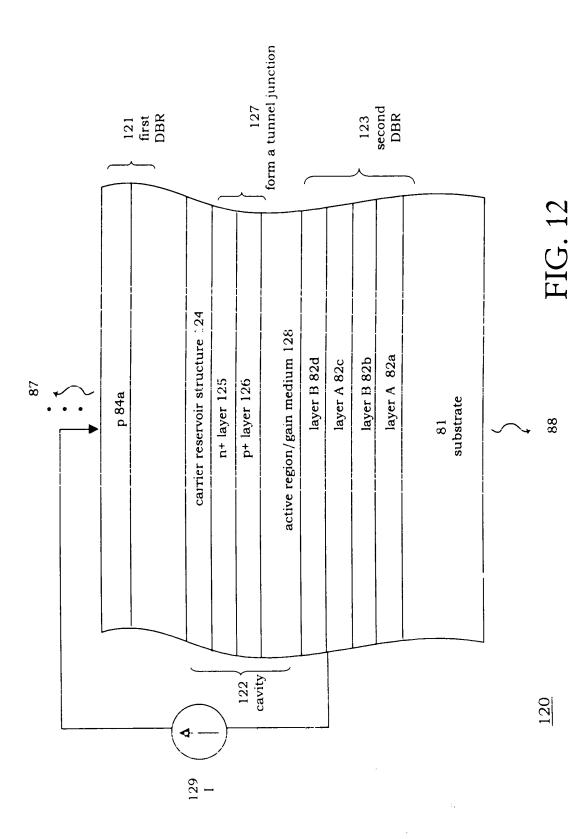
FIC











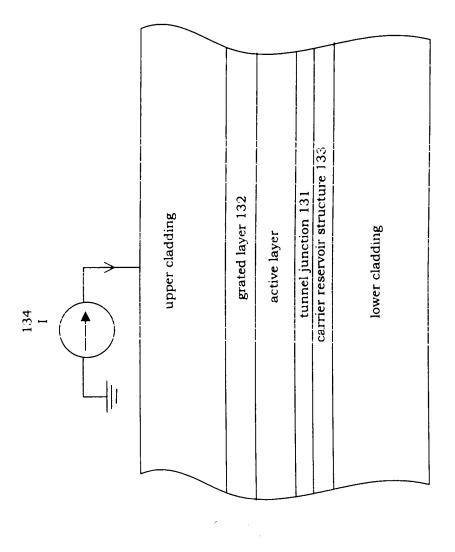


FIG. 13

130

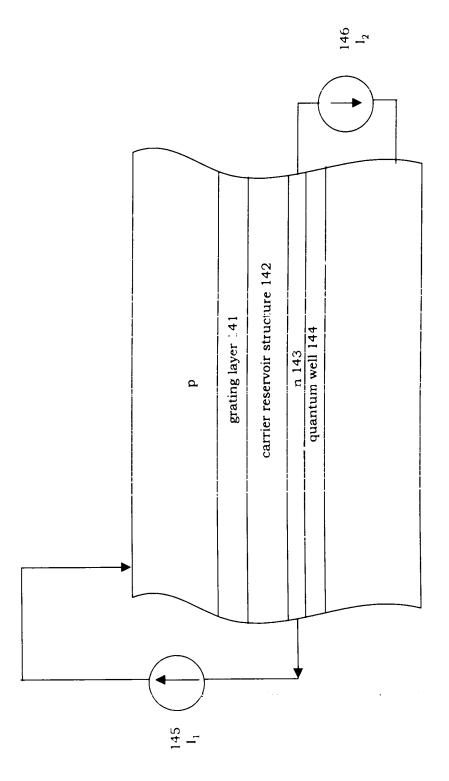
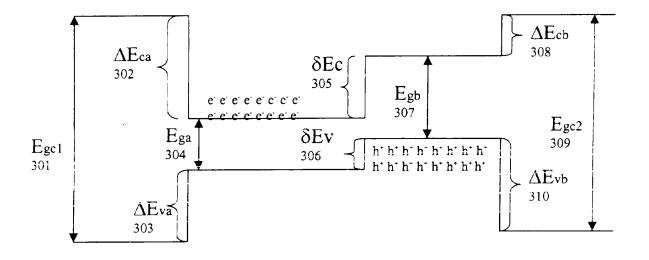


FIG. 14



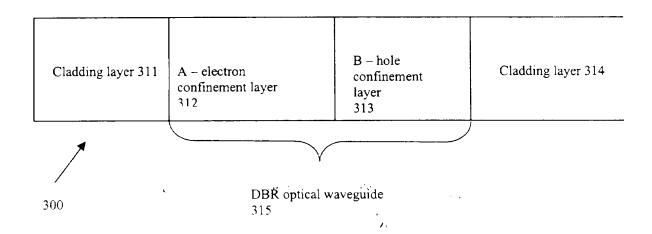
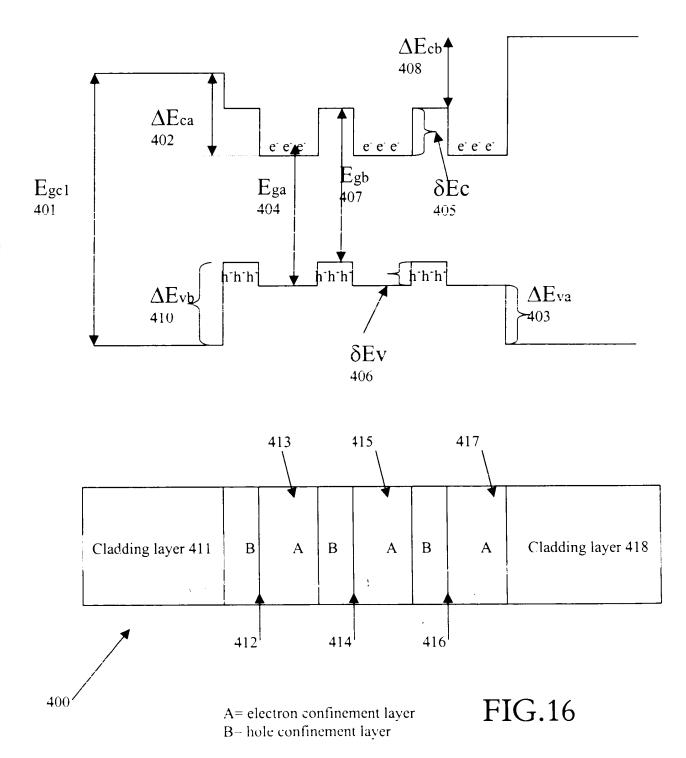
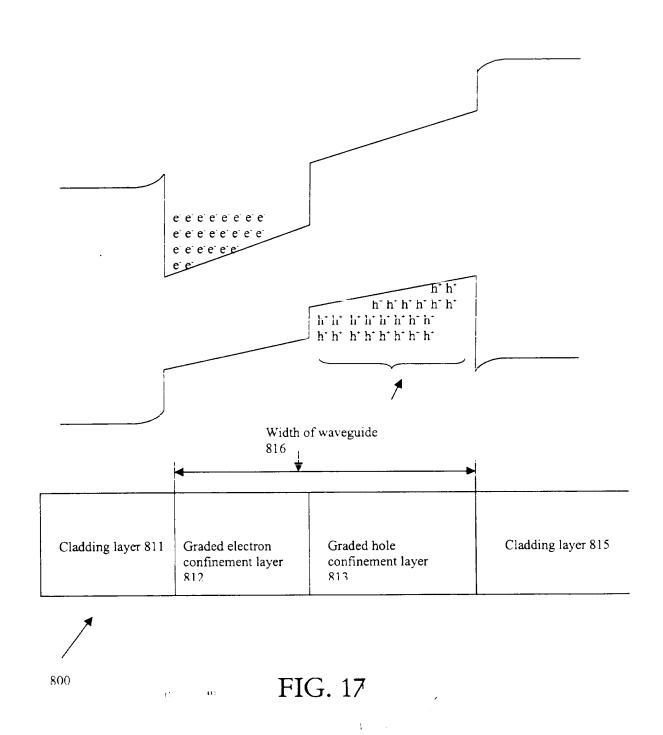
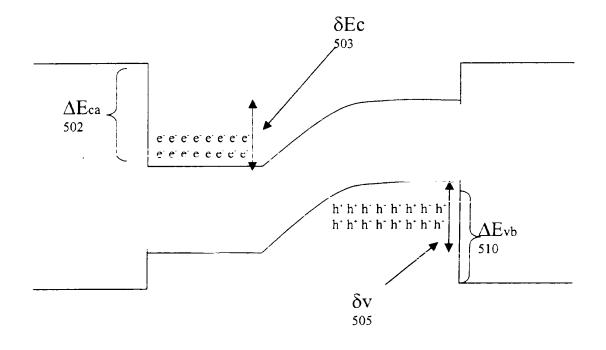


FIG. 15







| Cladding layer 511 | A – electron<br>confinement<br>layer 512 | Graded layer 513 A → B | B - hole<br>confinement<br>layer 514 | Cladding layer 515 |
|--------------------|--|------------------------|--------------------------------------|--------------------|
|--------------------|--|------------------------|--------------------------------------|--------------------|

500

FIG. 18

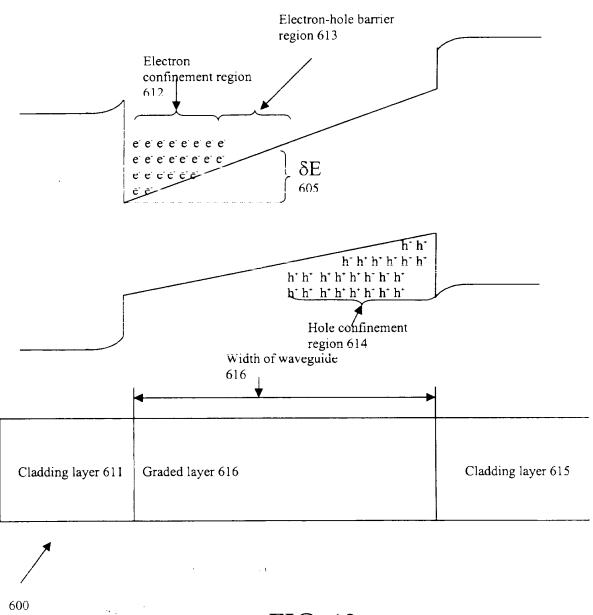


FIG. 19

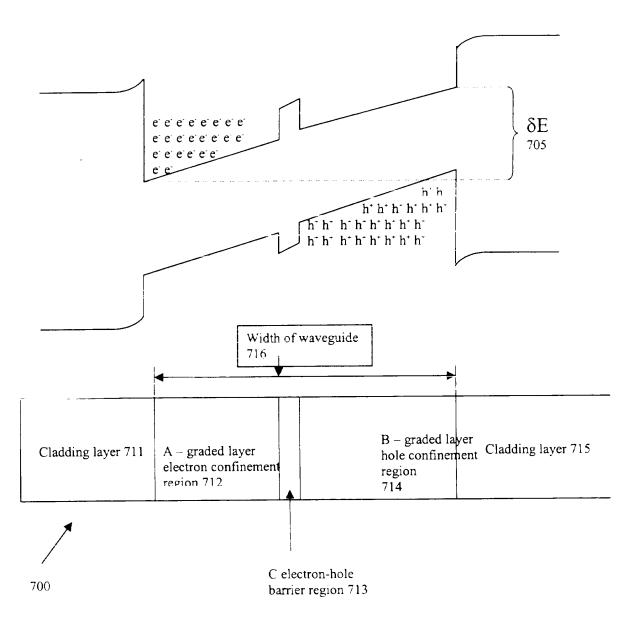


FIG. 20

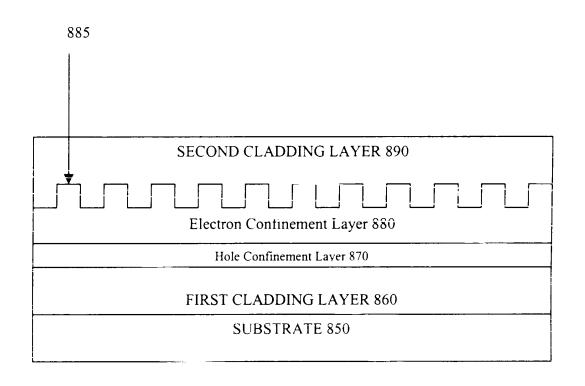


FIG. 21

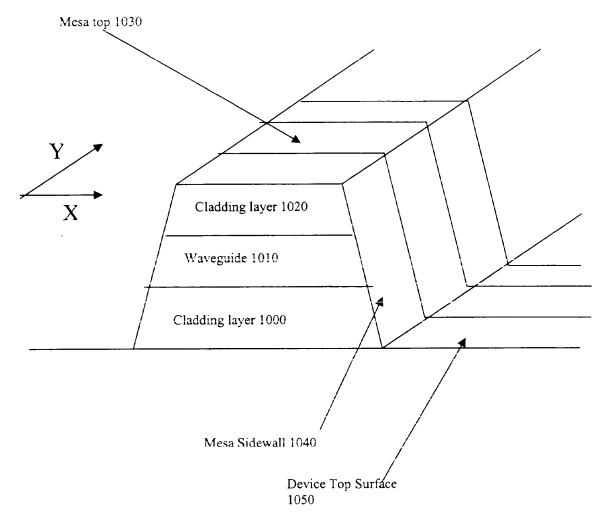


FIG. 22

| Create a first cladding layer (Step 910).                                       |
|---|
|   |
| Create a grating layer (Step 920).  |
|   |
| Create a hole confinement region layer (Step 930).                              |
|   |
| Create an electron confinement region layer (Step 940).                         |
|   |
| Create a second cladding layer (Step 950).                                      |
|   |
| (Optional) Pattern laser structure and additional device processing (Step 960). |

FIG. 23